

Regional HIV/AIDS Epidemiologic Profile of Southeast Health Service Region, Massachusetts: 2011

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed while residing in another state before being reported in Massachusetts. As of January 1, 2011, this resulted in the removal of 2,297 HIV/AIDS cases, of which 739 have died and 1,558 were living. These persons living with HIV/AIDS may currently reside and receive care in the Commonwealth. The total number of persons living in Massachusetts with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis, if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 41% of recent HIV diagnoses among females are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2010: Southeast Health Service Region, Massachusetts²

	N	%
People Living with HIV/AIDS	2,412	57%
People Reported with HIV or AIDS who are Deceased	1,818	43%
Total Number of People Reported with HIV Infection or AIDS	4,230	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 2. Average annual rate of HIV infection diagnosis from 2007 to 2009 and HIV/AIDS prevalence rate on 12/31/10¹: Southeast Health Service Region, Massachusetts²

Average annual HIV diagnosis rate from 2007–2009	Average rate per 100,000	Average annual number of HIV diagnoses
Southeast Health Service Region, MA	7.4	94.3
Massachusetts Total	9.4	607.3
HIV/AIDS prevalence rate on 12/31/10	Rate per 100,000	Number of people living with HIV/AIDS
Southeast Health Service Region, MA	188.7	2,412
Massachusetts Total	273.7	17,621

¹ The denominators for prevalence calculations are based on year 2005 population estimates from the MDPH Bureau of Health Statistics, Research and Evaluation.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2000–2009, Southeast Health Service Region, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2000	1,800	53	167
2001	1,891	70	161
2002	1,975	66	150
2003	2,019	68	112
2004	2,087	50	118
2005	2,140	55	108
2006	2,208	44	112
2007	2,271	40	103
2008	2,308	50	87
2009	2,363	38	93

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 4. People diagnosed with HIV infection from 2007–2009¹ and people living with HIV/AIDS on December 31, 2010 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Southeast Health Service Region, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	216	76%	1,714	71%
Female	67	24%	698	29%
Place of Birth:	N	%	N	%
US	185	65%	1,851	77%
Puerto Rico/US Dependency ³	15	5%	148	6%
Non-US	83	29%	413	17%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	153	54%	1,508	63%
Black (non-Hispanic)	77	27%	514	21%
Hispanic/Latino	49	17%	361	15%
Other/Undetermined ⁴	4	1%	29	1%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	119	42%	926	38%
Injection Drug Use (IDU)	25	9%	544	23%
MSM/IDU	9	3%	74	3%
Heterosexual Sex	37	13%	354	15%
Other	0	0%	59	2%
Total Undetermined	93	33%	455	19%
• Presumed Heterosexual Sex ⁵	30	11%	166	7%
• Undetermined ⁶	63	22%	289	12%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2010	
Under 13	0	0%	8	<1%
13 to 19	4	1%	21	1%
20 to 24	18	6%	35	1%
25 to 29	22	8%	61	3%
30 to 34	31	11%	130	5%
35 to 39	36	13%	204	8%
40 to 44	52	18%	422	17%
45 to 49	58	20%	568	24%
50 to 54	36	13%	466	19%
55 to 59	18	6%	280	12%
60+	8	3%	217	9%
Total	283	100%	2,412	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

⁴ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity

⁵ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁶ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11

Table 5. People living with HIV/AIDS on December 31, 2010 by gender and race/ethnicity: Southeast Health Service Region, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	1,177	69%	331	47%
Black (non-Hispanic)	283	17%	231	33%
Hispanic/Latino	236	14%	125	18%
Other/Undetermined ²	18	1%	11	2%
Total	1,714	100%	698	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 6. People living with HIV/AIDS on December 31, 2010 by gender and exposure mode: Southeast Health Service Region, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	926	54%	N/A	N/A
Injection drug use (IDU)	330	19%	214	31%
MSM/IDU	74	4%	N/A	N/A
Heterosexual sex	104	6%	250	36%
Other	36	2%	23	3%
Total Undetermined	244	14%	211	30%
• Presumed heterosexual sex ²	N/A	N/A	166	24%
• Undetermined ³	244	14%	45	6%
Total	1,714	100%	698	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Southeast Health Service Region, Massachusetts¹, 2000–2009²

	Male		Female		Total
	N	%	N	%	
2000	112	67%	55	33%	167
2001	108	67%	53	33%	161
2002	105	70%	45	30%	150
2003	76	68%	36	32%	112
2004	90	76%	28	24%	118
2005	85	79%	23	21%	108
2006	78	70%	34	30%	112
2007	82	80%	21	20%	103
2008	66	76%	21	24%	87
2009	68	73%	25	27%	93

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Southeast Health Service Region, Massachusetts¹, 2000–2009²

	White NH		Black NH		Hispanic/Latino		Other/ Undetermined ³		Total
	N	%	N	%	N	%	N	%	
2000	95	57%	48	29%	22	13%	2	1%	167
2001	104	65%	40	25%	17	11%	0	0%	161
2002	83	55%	34	23%	31	21%	2	1%	150
2003	73	65%	27	24%	10	9%	2	2%	112
2004	65	55%	24	20%	27	23%	2	2%	118
2005	65	60%	32	30%	10	9%	1	1%	108
2006	66	59%	28	25%	14	13%	4	4%	112
2007	56	54%	24	23%	22	21%	1	1%	103
2008	49	56%	28	32%	9	10%	1	1%	87
2009	48	52%	25	27%	18	19%	2	2%	93

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

NH = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Southeast Health Service Region, Massachusetts¹, 2000–2009²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2000	116	69%	8	5%	43	26%	167
2001	120	75%	5	3%	36	22%	161
2002	103	69%	17	11%	30	20%	150
2003	80	71%	7	6%	25	22%	112
2004	83	70%	10	8%	25	21%	118
2005	80	74%	6	6%	22	20%	108
2006	79	71%	1	1%	32	29%	112
2007	67	65%	7	7%	29	28%	103
2008	59	68%	3	3%	25	29%	87
2009	59	63%	5	5%	29	31%	93

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Southeast Health Service Region, Massachusetts¹, 2000–2009²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2000	57	34%	37	22%	2	1%	33	20%	2	1%	14	8%	22	13%	167
2001	47	29%	33	20%	7	4%	23	14%	5	3%	14	9%	32	20%	161
2002	52	35%	37	25%	4	3%	24	16%	2	1%	10	7%	21	14%	150
2003	39	35%	20	18%	4	4%	14	13%	2	2%	16	14%	17	15%	112
2004	52	44%	13	11%	2	2%	11	9%	2	2%	12	10%	26	22%	118
2005	47	44%	15	14%	4	4%	11	10%	1	1%	9	8%	21	19%	108
2006	56	50%	10	9%	0	0%	10	9%	1	1%	15	13%	20	18%	112
2007	47	46%	14	14%	3	3%	12	12%	0	0%	7	7%	20	19%	103
2008	36	41%	6	7%	4	5%	12	14%	0	0%	9	10%	20	23%	87
2009	36	39%	5	5%	2	2%	13	14%	0	0%	14	15%	23	25%	93

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² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Southeast Health Service Region, Massachusetts¹, 2000–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2000	54	167	32%
2001	72	161	45%
2002	66	150	44%
2003	39	112	35%
2004	47	118	40%
2005	39	108	36%
2006	45	112	40%
2007	39	103	38%
2008	31	87	36%
2009	35	93	38%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/11

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Southeast Health Service Region, Massachusetts,¹ 2007–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	80	216	37%
Female	25	67	37%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	55	153	36%
Black (non-Hispanic)	28	77	36%
Hispanic/Latino	21	49	43%
Other/Undetermined ³	1	4	25%
Place of Birth:	N	N	%
US	64	185	35%
Puerto Rico/US Dependencies ⁴	6	15	40%
Non-US	35	83	42%
Total	105	283	37%

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² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2007–2009 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands and <1% were born in Guam.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11